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10/598,094	08/17/2006	Takeshi Yamamoto	70404.105/ha	1001

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EXAMINER	
PATTON, SPENCER D	
ART UNIT	PAPER NUMBER
3664	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/598,094	YAMAMOTO ET AL.	
	Examiner	Art Unit	
	SPENCER PATTON	3664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 14-20* is/are rejected.

7)☒ Claim(s) *13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/17/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The disclosure is objected to because of the following informalities: The two paragraphs on page 7, line 18 through page 8 line 11 are contradictory. One paragraph states displaying an image if the relative speed is equal to or **lower** than a value, and the other paragraph discusses that this helps a driver identify an object approaching at a relative speed equal to or **above** a value. Appropriate correction is required to the specification and, if necessary, claim 7.

Claim Objections

4. Claims 6, 7 and 9 are objected to because of the following informalities:

Claim 6, line 3: “mean” should be changed to --means--.

Claim 6, line 4: “other” should be changed to --another--.

Claim 7, line 3: “other" should be changed to --another--.

Claim 9, line 3: “ITS” should be changed to --Intelligent Transport Systems (ITS)--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The term "close" in claims 1, 18 and 19 is a relative term which renders the claim indefinite. The term "close" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The claims and the specification do not disclose what positions are close to the speedometer, and what positions are not close to the speedometer.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1, 3, 4, 6-12, and 14-18** are rejected under 35 U.S.C. 102(b) as being anticipated by Niibe et al (JP 2001-101593).

Niibe et al teaches:

Re claim 1. A condition detection and display system, provided in traveling means that needs operation of a driver for traveling, for detecting a condition of the traveling means and surroundings around the traveling means and notifying the driver of detected condition of the traveling means and surroundings around the traveling means,

the system comprising:

display means for displaying images (meter unit 4, Figures 1 and 3) showing the condition of the traveling means (paragraph [0025]) and the surroundings around the traveling means (Figures 26, 35, 46, 54, 58, 59 and 62), and a speedometer that gives readouts on speed of the traveling means (paragraph [0025]),

wherein:

the images showing the condition of the traveling means and the surroundings around the traveling means are displayed at a position close to the speedometer (Figure 3).

Claim 18. A condition detection and display method, in traveling means that needs operation of a driver for traveling, for detecting a condition of the traveling means and surroundings around the traveling means and notifying the driver of detected condition of the traveling means and surroundings around the traveling means,

wherein:

images showing the condition of the traveling means and the surroundings around the traveling means are displayed at a position close to a speedometer (Figures 3, 26, 35, 46, 54, 58, 59 and 62 and paragraph [0025]).

Claim 3. Wherein:

the images showing the condition of the traveling means and the surroundings around the traveling means, contains an image of the traveling means (self-vehicle mark α, Figures 26, 27, 30 35, 39, 58 and 62).

Claim 4. Further comprising:

direction detecting means for detecting a direction of a front end of the traveling means (paragraph [0005]),

wherein:

on a basis of a detection result obtained by the direction detecting means, a direction of the image of the traveling means is changed (Figure 54).

Re claim 6. Further comprising:

distance detecting means for detecting a distance between the traveling mean and other object (paragraph [0174]); and

means for grasping a shape of the other object (Figure 35 shows that the system can distinguish between pedestrians and other vehicles),

wherein:

if there is an object approaching the traveling means at a distance equal to or less than a predetermined value from the traveling means, an image corresponding to the shape of the object is displayed (Figure 36 shows displaying images corresponding to the detected pedestrians or other vehicles.).

Re claim 7. Further comprising:

relative speed detecting means for detecting a relative speed of other object relative to the traveling means (paragraph [0233]); and

means for grasping a shape of the other object (Figure 35 shows that the system can distinguish between pedestrians and other vehicles),

wherein:

if there is an object approaching the traveling means at a relative speed equal to or lower than a predetermined value, an image corresponding to the shape of the object is displayed (Figure 36 shows displaying images corresponding to the detected pedestrians or other vehicles.).

Re claim 8. Wherein:

the predetermined value varies depending upon a speed of the traveling means and/or a direction where the other object is located with respect to the traveling means (paragraph [0236]).

Re claim 9. Further comprising:

communications means for receiving ITS information (paragraph [0033]),

wherein:

if the received ITS information contains information on surroundings around the traveling means, an image showing the surroundings around the traveling means, in accordance with the ITS information, is displayed at the position close to the speedometer (paragraphs [0044, 0114]).

Re claim 10. Further comprising:

means for detecting whether the traveling means is moving (run state detection means, paragraph [0044]),

wherein:

the images showing the condition of the traveling means and the surroundings around the traveling means are different depending upon a detection result obtained by the means for detecting whether the traveling means is moving (claim 4).

Re claim 11. Further comprising:

means for detecting a road marking marked on the road on which the traveling means, which is a vehicle, is moving (CCD camera, paragraph [0044]),

wherein:

a detected road marking is displayed as the image showing the surroundings around the traveling means (Figure 54).

Re claim 12. Further comprising:

means for detecting a direction of a front end of the traveling means with respect to the road marking (paragraph [0005]),

wherein:

the images showing the condition of the traveling means and the surroundings around the traveling means contain an image of the traveling means (Figure 54), and

a direction of the image of the traveling means is changed in accordance with the direction of the front end of the traveling means with respect to the road marking (Figure 54).

Claim 14. Wherein:

the images showing the condition of the traveling means and the surroundings around the traveling means are graphic images (Figures 26, 35, 46, 54, 58, 59 and 62).

Claim 15. Wherein:

the graphic images are able to be changed (Figures 26, 35, 46, 54, 58, 59 and 62).

Re claim 16. Further comprising:

an interface for receiving an instruction to change the graphic image (CPU 20, Figure 10).

Re claim 17. Wherein:

the traveling means includes an engine as driving means, and means for detecting an instruction to start the engine (paragraph [0055]),

wherein:

the images showing the condition of the traveling means and the surroundings around the traveling means are displayed in synchronization with the instruction to start the engine paragraph [0055]).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. **Claims 19 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Niibe et al (JP 2001-101593) in view of Obradovich et al (US Publication No. 2003/0004616).

Niibe et al teaches:

Claim 19. A control program for a condition detection and display system, provided in traveling means that needs operation of a driver for traveling, for detecting a condition of the traveling means and surroundings around the traveling means and notifying the driver of detected condition of the traveling means and surroundings around the traveling means,

the system comprising:

display means for displaying images showing the condition of the traveling means and the surroundings around the traveling means, and a speedometer that gives readouts on speed of the traveling means (Figures 3, 26, 35, 46, 54, 58, 59 and 62 and paragraph [0025]).

Niibe et al fails to specifically teach: **(re clam 19)** the control program causing a computer to function as control means for controlling the display means to display the images showing the condition of the traveling means and the surroundings around the traveling means at a position close to the speedometer; **(re claim 20)** a computer-readable storage medium storing the control program for the condition detection and display system according to claim 19.

Obradovich et al teaches, at paragraphs [0041 and 0049] and Figure 1, a processor 105 and memory 115 which control the output of instrument panel 102e.

In view of Obradovich et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the condition detection and display system as taught by Niibe et al, **(re clam 19)** the control program causing a computer to function as control means for controlling the display means to display the images showing the condition of the traveling means and the surroundings around the traveling means at a position close to the speedometer; **(re claim 20)** a computer-readable storage medium storing the control program for the condition detection and display system according to claim 19; since Obradovich et al teaches that a computer

may be used to control an instrument panel display interface, which allows a driver to view vehicle information in a way which they prefer.

12. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Niibe et al (JP 2001-101593) as applied to claim 1 above, and further in view of Ogawara (JP 2003-255340).

The teachings of Niibe et al have been discussed above. Niibe et al fails to specifically teach: **(re claim 2)** wherein: the speedometer is displayed around a periphery or a part of the periphery of the images showing the condition of the traveling means and the surroundings around the traveling means.

Ogawara teaches, at Figure 1 and the abstract, that providing a display for vehicle information within a speedometer provides a high-class feeling and drastically improved visibility.

In view of Ogawara's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the condition detection and display system as taught by Niibe et al; **(re claim 2)** wherein: the speedometer is displayed around a periphery or a part of the periphery of the images showing the condition of the traveling means and the surroundings around the traveling means; since Ogawara teaches that providing a display for vehicle information within a speedometer provides a high-class feeling and drastically improved visibility.

13. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Niibe et al (JP 2001-101593) as applied to claim 1 above, and further in view of Araki (JP 07-172214).

The teachings of Niibe et al have been discussed above. Nibbe et al fails to specifically teach: **(re claim 5)** wherein: the traveling means includes tires that transfer a drive force to a ground, and pneumatic pressure detecting means for detecting air pressure in the tires, wherein: if the air pressure in the tires is equal to or lower than a predetermined value, an image for notifying the driver of decrease in air pressure in the tires is displayed.

Araki teaches, at the abstract and Figure 2, a tire pressure reduction warning system for alerting a driver when the tire pressure is unsafe.

In view of Araki's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the condition detection and display system as taught by Niibe et al, **(re claim 5)** wherein: the traveling means includes tires that transfer a drive force to a ground, and pneumatic pressure detecting means for detecting air pressure in the tires, wherein: if the air pressure in the tires is equal to or lower than a predetermined value, an image for notifying the driver of decrease in air pressure in the tires is displayed; since Araki teaches that such system can alert a drier of unsafe driving conditions.

Allowable Subject Matter

14. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SPENCER PATTON whose telephone number is (571)270-5771. The examiner can normally be reached on Monday-Thursday 7:30-5:00; Alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on (571)272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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